

*Application Serial No. 10/808,538
Amendments dated April 28, 2006
Reply to Office Action mailed April 04, 2006*

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Please amend the claims as follows.

In the Claims:

1.-2. (Canceled)

3. (Currently Amended) An isolated polynucleotide according to claim 20 or 21 comprising, sequences encoding at least two rWI2 heavy chain CDRs, selected from the group of CDRs consisting of:

the complementary determining region -1 (CDR-1) sequence NYWMT (SEQ ID NO:1),

the complementary determining region -2 (CDR-2) sequence SITSTGGTYHAESVKG (SEQ ID NO:2), and

the complementary determining region -3 (CDR-3) sequence DDYGGQSTYVMDA (SEQ ID NO:3).

4. (Currently Amended) An isolated polynucleotide according to claim 20 or 21, comprising sequences encoding at least two rWI2 light chain CDRs, selected from the group of CDRs consisting of:

the complementary determining region -1 (CDR1) sequence RASQDIGNYLR (SEQ ID NO:4),

the complementary determining region -2 (CDR2) sequence GATNLAA (SEQ ID NO:5), and the complementary determining region -3 (CDR3) sequence LHHSEYPYT (SEQ ID NO:6).

5-8. (Canceled)

9. (Original) An isolated expression vector comprising a first gene for the WI2 heavy chain and second gene for the WI2 light chain.

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10. (Original) An isolated expression vector according to claim 9 wherein said light and heavy chains are chimeric or are humanized.
11. (Original) A host comprising said expression vector according to claim 9.
12. (Original) An isolated first expression vector comprising a gene for WI2 heavy chain and an isolated second expression vector comprising a gene for the WI2 light chain.
13. (Original) An isolated first and second expression vectors according to claim 12, wherein said genes are for chimeric or humanized WI2 light and heavy chain.
14. (Original) A host comprising said first and second expression vectors according to claim 12.
15. (Previously Presented) A method of stimulating an immune response in a patient against cancers expressing carcinoembryonic antigen, which comprises administering to said patient an effective amount of a vaccine comprising the humanized anti-idiotype antibody or antibody fragment encoded by the nucleic acid of claim 21, conjugated to a soluble immunogenic carrier protein, optionally in combination with a pharmaceutically acceptable vaccine adjuvant.
16. (Previously Presented) In a method of diagnosis or treatment of a patient, wherein an antibody or antibody fragment that specifically binds CEA is used as a targeting, pre-targeting or therapy agent, either as such or as a component of a conjugate,
the improvement wherein an anti-idiotype antibody encoded by the nucleic acid according to claim 21 is used to clear non-targeted antibody or antibody fragment.
17. (Canceled)
18. (Original) A method according to claim 16, wherein said anti-idiotype antibody or antibody fragment is labeled with a radiolabel, an enzyme, or a fluorescent agent.

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19. (Previously Presented) A vaccine, comprising the humanized anti-idiotype antibody or antibody fragment encoded by the nucleic acid of claim 21, conjugated to a soluble immunogenic carrier protein, for use in stimulating an immune response in a patient against a cancer characterized by expression of CEA.

20. (Previously Presented) A nucleic acid encoding a chimeric anti-idiotype antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds to the idiotype region of an anti-CEA monoclonal antibody comprising the rWI2 light chain and heavy chain variable regions.

21. (Previously Presented) A nucleic acid encoding a humanized anti-idiotype antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds the idiotype region of an anti-CEA monoclonal antibody comprising rWI2 CDR regions-and humanized FR regions.